Product/Process Change Notice - PCN 11_0002 Rev. B

Analog Devices, Inc. Three Technology Way Norwood, Massachusetts 02062-9106

This notice is to inform you of a change that will be made to certain ADI products (see Material Report). Any issues with this PCN or requirements to qualify the change (additional data or samples) must be sent to ADI within 30 days of publication date. ADI contact information is listed below.

Note: Revised fields are indicated by a red field name. See Appendix B for revision history.

PCN Title: Layout change to ADP2503/4 to resolve latch-up issue during operation

Publication Date: 27-Apr-2012

Effectivity Date: 27-Apr-2012 *(the earliest date that a customer could expect to receive changed material)*

Revision Description:

Correction to effective date code from 1119 to 1117

Description Of Change

Layout change to separate certain NMOS and PMOS MOSFETS and insert substrate contacts and well ties between them to prevent latch-up. No physical changes have been made to the sizes of any components, and no schematic changes have been made.

Reason For Change

Layout change to prevent latch-up which only occured for Vin>4.3V (approx).

Impact of the change (positive or negative) on fit, form, function & reliability

Reliability is improved as the sensitivity of the device to latch-up is greatly reduced due to the improvement in substrate and well contacting.

Product Identification *(this section will describe how to identify the changed material)*

This change was effective from date code 1117 (Rev A stated 1119).

Summary of Supporting Information

Verification of new silicon was performed by:
1. ATE testing of 2000 parts
2. Lab evaluation of a sample of parts in an application environment (i.e operation of an ADI Demo Board)
3. ESD testing

Results are available on request.

Comments

Customers who operate with VIN below 4.3V have no issue with present production silicon, and will see no operational difference with new silicon. Customers who operate with VIN up to 5.5V can now be guaranteed to have no latch up issues.

Supporting Documents None

For questions on this PCN, send email to the regional contacts below or contact your local ADI sales representative					
Americas:	PCN_Americas@analog.com	**Europe:**	PCN_Europe@analog.com	**Japan:**	PCN_Japan@analog.com
				Rest of Asia:	PCN_ROA@analog.com

Appendix A - Affected ADI Models				
Existing Parts - Product Family / Model Number (14)				
ADP2503 / ADP2503ACPZ-2.8-R7	ADP2503 / ADP2503ACPZ-3.3-R7	ADP2503 / ADP2503ACPZ-3.5-R7	ADP2503 / ADP2503ACPZ-4.2-R7	ADP2503 / ADP2503ACPZ-4.5-R7
ADP2503 / ADP2503ACPZ-5.0-R7	ADP2503 / ADP2503ACPZ-R7	ADP2504 / ADP2504ACPZ-2.8-R7	ADP2504 / ADP2504ACPZ-3.3-R7	ADP2504 / ADP2504ACPZ-3.5-R7
ADP2504 / ADP2504ACPZ-4.2-R7	ADP2504 / ADP2504ACPZ-4.5-R7	ADP2504 / ADP2504ACPZ-5.0-R7	ADP2504 / ADP2504ACPZ-R7	

Appendix B - Revision History		
Rev	**Publish Date**	**Rev Description**
Rev. -	21-Feb-2011	Initial Release
Rev. A	04-Apr-2012	Update to include date code changeover
Rev. B	27-Apr-2012	Correction to effective date code from 1119 to 1117

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